

Appl. No. 09/886,521  
Amdt. dated March 3, 2006  
Reply to Office Action of September 7, 2005

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

Claim 1 (Currently amended): An apparatus comprising:

a first substrate having a plurality of through holes; [[and]]

a plurality of cables each comprising a conductor, each cable extending through respective ones of the plurality of through holes of the first substrate and terminating about a surface of the first substrate; ~~such that the conductors of respective ones of the plurality of cables are planarly aligned and available for electrical contact to a second different substrate~~

a contactor comprising a plurality of contacts disposed to contact an electronic device to be tested; and

an interconnection means for providing a plurality of flexible, spring-like electrical connections between the cables and the contacts of the interface substrate.

Claim 2 (Original) The apparatus of claim 1, wherein at least one of the plurality of cables comprise coaxial cables including a central conductor and a shield, and the shield of the at least one of the plurality of cables is planarly aligned with the central conductor.

Claim 3 (Previously presented) The apparatus of claim 1, wherein the plurality of through holes of the first substrate are configured such that conductors are aligned with respective contact points of an electronic component.

Claim 4 (Original) The apparatus of claim 3, wherein the electronic component is a circuit test component.

Claim 5 (Original) The apparatus of claim 4, wherein the electronic component is one of an interposer and a space transformer.

Claim 6 (Original) The apparatus of claim 1, wherein the surface of the substrate comprises a dielectric material.

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Claim 7 (Original) The apparatus of claim 1, wherein contact pads are coupled to respective conductors at the surface of the substrate.

Claim 8 (Original) The apparatus of claim 1, wherein ends of the conductors of respective ones of the plurality of cables about the surface of the substrate are coated with a material that resists oxidation.

Claim 9 (Original) The apparatus of claim 8, wherein the material is selected from one of gold, platinum, palladium, or other metallic conductor.

Claim 10 (Original) The apparatus of claim 1, wherein the conductors of the plurality of cables comprise first conductors designated as data signal lines between a first electronic component and a second electronic component.

Claim 11 (Original) The apparatus of claim 10, wherein the apparatus further comprises a plurality of second conductors terminating about the surface of the substrate and available for electrical contact and the second conductors are designated as supply and return lines.

Claim 12 (Original) The apparatus of claim 11, wherein the second conductors each comprise a portion of a respective cable.

Claim 13 (Previously Presented) The apparatus of claim 11, wherein the first conductors are disposed in a first area of the substrate and the second conductors are disposed in a different second area.

Claim 14 (Currently amended) ~~The apparatus of claim 1;~~ An apparatus comprising:  
a first substrate having a plurality of through holes; and

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a plurality of cables each comprising a conductor, each cable extending through respective ones of the plurality of through holes of the first substrate and terminating about a surface of the first substrate such that the conductors of respective ones of the plurality of cables are planarly aligned and available for electrical contact to a second different substrate,

wherein the substrate is a first substrate and the conductors of the plurality of cables comprise first conductors designated as data signal lines between a first electronic component and a second electronic component, the apparatus further comprising a second substrate disposed about the first substrate and comprising supply and return lines adapted to be coupled to corresponding supply and return lines of one of the first electronic component and the second electronic component.

Claim 15 (Currently amended) ~~The apparatus of claim 1,~~ An apparatus comprising:

a first substrate having a plurality of through holes; and  
a plurality of cables each comprising a conductor, each cable extending through respective ones of the plurality of through holes of the first substrate and terminating about a surface of the first substrate such that the conductors of respective ones of the plurality of cables are planarly aligned and available for electrical contact to a second different substrate,

wherein the substrate is a first substrate and the plurality of cables are a first plurality of cables, and the apparatus further comprises:

a second substrate coupled to the first substrate, the second substrate comprising a plurality of cables, each comprising a conductor and each extending through respective through holes of the second substrate and terminating about a surface of the second substrate.

Claim 16 (Original) The apparatus of claim 15, wherein the conductor of the first plurality of cables comprise data signal lines and the second plurality of cables comprises supply and return lines.

Claims 17-27 (Canceled)

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Claims 28 (New): The apparatus of claim 1, wherein the interconnection means comprises an interposer substrate and a plurality of elongate, electrically conductive, resilient interconnection elements extending from opposite surfaces of the interposer substrate.

Claim 29 (New): The apparatus of claim 1, wherein the interconnection means comprises a plurality of elongate, electrically conductive, resilient interconnect elements.

Claim 30 (New): The apparatus of claim 1 further comprising a second substrate, wherein the second substrate is configured to provide power and ground to the electronic device to be tested and the cables are configured to provide data signals to and from the electronic device to be tested.

Claim 31 (New): The apparatus of claim 1 further comprising means for altering an orientation of the contactor.

Claim 32 (New): The apparatus of claim 1, wherein each of the contacts comprises an elongate, spring-like probe.

Claim 33 (New): The apparatus of claim 1, wherein the conductors of respective ones of the plurality of cables are planarly aligned.